REMARKS

This application has been carefully reviewed in view of the above-referenced Office Action, and reconsideration is requested in view of the following remarks.

Regarding the Rejections in General

Claims 1-18 were rejected based upon the combination of Zdepski and Tiwara of record. Regarding claims 1-9:

As noted in the prior response, the Zdepski reference of record discusses trick play techniques used in related art systems (not Zdepski's system) at the last paragraph of col. 3, and first paragraph of col. 4. These related art systems use look-up tables of I frames to produce fast forward and fast reverse video streams. However, one must take this in context. Zdepski explicitly complains that this process is too burdensome on the video server. Zdepski proposes solving this problem by use of a method for generating fast forward and fast reverse streams "which does not require real time processing of video data, such as index lookups". (see col. 4., lines 36-37) Hence, it is clearly Zdepski's intent that there be no index lookups in his process.

To generate Zdepski's trick play, the full normal play MPEG bit stream is filtered for I frames, sequence headers and weighting matrices and these are stored in one or more new files. This filtered file (or files) is then stored in either forward or reverse order. Let us assume that it is stored in forward order as Zdepski apparently does for his illustration. At col. 8, lines 33-39, Zdepski indicates that if a fast reverse trick play is carried out, "the Verifier/Fixer 104 reverses the order of the sequence header/I frame groupings or tuples to produce a reverse play sequence." The full operation of this "Verifier/Fixer 104" is called out in Figure 4 and apparently simply uses time order to accomplish either forward or backward motion. It is clear that Zdepski utilizes no stored indices as required in the claims. This is wholly consistent with Zdepski's intent since he has stated both that such index lookups are burdensome on the video server and are not required in his invention.

It is clear from the above that Zdepski is not only improperly modified by addition of indices, but that Zdepski clearly teaches against use of indices and is striving to eliminate them.

As the Office Action acknowledges on page 3, first paragraph, "Zdepski acknowledges that storing indices is well-known in the art" and asserts that "Zdepski although not requiring index look-ups in his invention acknowledges that look-up tables are well known and therefore would have been obvious to one of skilled [sic] in the art to have incorporated index look-ups for the benefit of providing increased flexibility with regards to the capability of being able to adapt to user preferences and capability to be application specific wherein storage capacity is not prioritized." The Office further asserts "skip playback trickmode in which a user may jump to a particular section would also not be feasible without look-up tables, hence if skip mode is a desired functionality then using look-up tables would be the alternative." Applicants submit that these assertions are speculative and not supported by evidence of record. Moreover, the advantages, functions and benefits of Zdepski are destroyed by the proposed modification/combination.

First, it is again noted that the Office has failed to address the fact that Zdepski seeks to solve the problems associated with look-up tables and indices and eliminate them (col. 4, lines 1-16, and lines 36 and 37). In view of this teaching against use of indices, the Office must produce a compelling case for going against Zdepski's explicit teaching against before use of indices with Zdepski would be obvious.

Second, the Office's assertion that adding index look-ups provide increased flexibility with regards to the capability of being able to adapt to user preferences and the capability to be application specific wherein storage capacity is not prioritized. However, there is no evidence of record that supports this assertion. The Office has erred in simply asserting that the combination adds flexibility, without accounting for the fact that it destroys or severely diminishes advantages taught by Zdepski in connection with use of his indexless implementation. The assertion that the use of indexes provides increased flexibility and being able to adapt to user preferences when storage capacity is not prioritized is not contemplated by the evidence of record. Incorporating such "flexibility" would appear to Applicants to be at the expense of the very benefits sought by Zdepski.

Third, the assertion that "skip playback trick mode" is not feasible without lookup tables is also unsupported by any evidence. Moreover, there is no evidence that such a skip playback

trick mode indices would meet the claim features claimed by Applicants. The full requirements of the claimed indices must be taken into account. Applicants respectfully request that the Office's position in this regard be proven. Applicants also submit by way of speculation and not admission that trick mode tables specifically designed only for skip mode and not providing the functionality of Applicants' index tables as claimed might be feasible, but would fail to provide the required teaching to obviate the claims.

Fourth, Applicants' index tables use forward and reverse indices that index the second file (containing the intra-coded frames). Zdepski's discussion appears to use index tables that reference I frames in fast forward and fast reverse streams (presumably full streams as is conventional). In such case, the indices are used to retrieve only the I frames from full streams. Applicants' claims, on the other hand, use forward and reverse indices to reference I frames stored separately in a second file (to paraphrase without intent of limitation).

Fifth, Applicants claim a pair of lookup tables (forward and reverse), but Zdepski only discusses a single lookup table. For the Patent Office to modify or combine references in an obviousness rejection, the Patent Office must first establish *prima facie* obviousness by showing where each and every element is taught or suggested in the combined references. MPEP § 2143.03. This is fundamental to an analysis under the factual inquiries required by *Graham v. John Deere*, 383 U. S. 1 (Supreme Court, 1966) as a part of identification of the scope and content of the prior art. The Patent Office has failed to do so in the present rejection. The Office has failed to identify both a forward and reverse lookup table as claimed. Furthermore, the Office has failed to provide any articulated reasoning as to why one of ordinary skill in the art would find the claims as a whole to be obvious in the absence of the claim features not present in the cited art (See *In re Kahn*, 441 F. 3d 977, 988 (CA Fed. 2006), as explicitly endorsed by the Supreme Court). Such an analysis is required in order to satisfy the factual inquiry ascertaining the differences between the prior art and the claims at issue. Accordingly, the Patent Office has failed to establish *prima facie* obviousness and the present rejection should be withdrawn.

In view of the above, it is believed clear that Zdepski is deficient to obviate Applicants' claims.

The Office Apparently attempts to cure the deficiencies of Zdepski by making a combination with Tiwara and references col. 4 lines 10-33 and col. 5, lines 10-47. The Office makes essentially the same assertions as above to justify the combination with Zdepski, with essentially the same resultant flaws.

To summarize:

First, it is again noted that the Office has failed to address the fact that Zdepski seeks to solve the problems associated with look-up tables and indices and eliminate them (col. 4, lines 1-16, and lines 36 and 37). In view of this teaching against use of indices, the Office must produce a compelling case for going against Zdepski's explicit teaching against before use Tiwara's indices with Zdepski would be obvious.

Second, the Office's asserts that adding Tiwara's index look-ups provide increased flexibility with regards to the capability of being able to adapt to user preferences and the capability to be application specific wherein storage capacity is not prioritized. However, there is no evidence of record that supports this assertion. The Office has again erred in simply asserting that the combination adds flexibility, without accounting for the fact that it destroys or severely diminishes advantages taught by Zdepski in connection with use of his indexless implementation. The assertion that the use of indexes provides increased flexibility and being able to adapt to user preferences when storage capacity is not prioritized is not contemplated by the evidence of record. Incorporating such "flexibility" by combination with Tiwara would appear to Applicants to be at the expense of the benefits sought by Zdepski.

Third, the assertion that "skip playback trick mode" is not feasible without lookup tables is also unsupported by any evidence. Again, there is no evidence that such a skip playback trick mode table would meet the claim features claimed by Applicants. Applicants respectfully request that the Office's position in this regard be proven.

Fourth, Applicants' index tables use forward and reverse indices that index the second file (containing the intra-coded frames). Zdepski's discussion appears to use index tables that reference I frames in fast forward and fast reverse streams (presumably full streams as is conventional). In such case, the indices are used to retrieve only the I frames from full streams. Tiwara's indices on the other hand, reference a collection of "ancillary stream pictures"

constructed as a set of pictures stored specifically for trick play. However, the ancillary stream pictures do not meet the claim features of being "a duplicate of the intra-coded frames of the content" as called out in Applicants' claims. Instead, Tiwara generates a set of pictures consisting of "every n^{th} picture". While these pictures are constructed as intra-coded pictures, they do not meet the claim feature of being a duplicate of the I-frames stored in the second file as claimed.

Fifth, Applicants' claims use both forward and reverse indices to reference a file of duplicate I frames stored separately in a second file (to paraphrase without intent of limitation). Using claim 1 as an example, neither Zdepski nor Tiwara meet the claim features of "storing a duplicate of the intra-coded frames of the content in a second file" together with storing both "a set of forward indices" as claimed and "storing a set of reverse indices". In fact, in either Zdepski or Tiwara Applicants are only able to identify teaching of a single one index table used for trick mode (e.g., col. 4, line 12 "a lookup table 22"). The Office has failed to identify both a forward and reverse lookup table as claimed or provide an articulated reasoning for the absence of both tables claimed.

In view of the above, it is believed clear that Zdepski in combination with Tiwara is deficient to obviate Applicants' claims 1-9. Reconsideration and allowance are respectfully requested.

Regarding claims 10-18:

Claims 10-18 are rejected for similar reasons as claims 1-9. These claims differ from claims 1-9 in a number of ways, but notably, these claims do not call for two indices (forward and reverse). However, the above arguments except for those relating to failure of the Office to show both forward and reverse indices are equally applicable. Reconsideration and allowance are respectfully requested.

Regarding claims 19-44:

The Office rejects claims 19-44 based upon the combination of Boyle and Tiwari of record.

Regarding claims 19-27 and 44:

The Office asserts that "Boyle and Tiwari ... disclose storing a set of forward and reverse indices." Tiwari is discussed above and those discussions are applicable. Boyle, as best the undersigned can determine provides little more relevant disclosure than that briefly summarized in Zdepski's background. Specifically, Boyle fails to disclose "storing a set of forward indices" as claimed and "storing a set of reverse indices" as claimed. Neither reference discloses storing the second file which is a duplicate of the I-frames as claimed. Instead, the index of Boyle indexes the start of intra-coded reference frames and data indicative of the location of such intra-coded frames. (see col. 3, lines 26-34). This deficiency is not cured by Carubba. (Carrubba appears to only show separate storage of intra-coded and inter-coded for use in presentation of an image in a basic part or a basic part plus a complementary part – there is no duplication of the I-frames in the separately stored file. Carrubba appears unrelated to trick-play.) Hence, the Office Action is again deficient in providing for all of the claim features and *prima facie* obviousness has not been established.

Regarding claims 28-43:

These claims have been cancelled without prejudice to expedite prosecution and to simplify matters for appeal. Applicants reserve the right to present these claims and arguments favoring patentability thereof in a continuing application.

Concluding Remarks

The undersigned additionally notes that many other distinctions exist between the cited art and the claims. However, in view of the clear distinctions pointed out above, further discussion is believed to be unnecessary at this time. Failure to address each point raised in the Office Action should accordingly not be viewed as accession to the Examiner's position or an admission of any sort. No amendment made was for the purpose of narrowing the scope of any claim unless an argument has been made herein that such amendment has been made to distinguish over a particular reference or combination of references. Applicants reserve the right

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to make further arguments favoring patentability of any claim at a future date.

Interview Request

In view of this communication, all claims are now believed to be in condition for allowance and such is respectfully requested at an early date. If further matters remain to be resolved, the undersigned respectfully requests the courtesy of an interview. The undersigned can be reached at the telephone number below.

Respectfully submitted,

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